

DERWENT-ACC-NO: 1998-143453

DERWENT-WEEK: 199813

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TITLE: Transesterification process - using
specified catalysts,
molar ratios, and conditions

PATENT-ASSIGNEE: ANONYMOUS [ANON]

PRIORITY-DATA: 1998RD-0406010 (January 20, 1998)

PATENT-FAMILY:

PUB-NO	PAGES	PUB-DATE	MAIN-IPC
RD 406010 A 000	C07C 000/00	February 10, 1998	N/A

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-DESCRIPTOR	APPL-NO
RD 406010A		N/A	
1998RD-0406010		January 20, 1998	

INT-CL (IPC): C07C000/00, C07D000/00

ABSTRACTED-PUB-NO: RD 406010A

BASIC-ABSTRACT:

The process includes (A) forming a reaction mixture of an alcohol, a polymerisation inhibitor, an acrylate or methacrylate, and a catalyst, with a mole ratio of alcohol to acrylate or methacrylate of from 1:1 to 1:20; (B) reacting the mixture A) at 60 deg. - 140 deg. C. and pressure 400 mm Hg - 760 mm Hg; and (C) removing solvent, acrylate, and/or methacrylate and reaction by-products azeotropically to provide the desired monomer. The alcohol utilised has a structure of the formula R-OH, wherein R is

8 - 24C alkyl;
- (OCHXCHX-)a-(CH₂)_bCH₃, where a = 2 - 26, b = 7 - 23, and X
is H or methyl,
provided both X substituents are not methyl at the same
time; a substituent of
formula (I) or (II). A and B = 2 - 5 C alkylene.

The acrylate or methacrylate is generally a 1-8C branched
or straight chain
alkyl acrylate or methacrylate. Suitable polymerisation
inhibitors include
diethylhydroxylamine, p-methoxy phenol, hydroquinone,
phenothiazine, 4-hydroxy
tetra methyl piperidinyloxy, and mixtures and derivatives
thereof. The amount
of inhibitor is 10 - 10,000 parts per million based on the
alcohol charge. The
catalyst added may be dibutyl tin oxide, dibutyl tin
dimethoxide, or reaction
products of dibutyl tin oxide or dibutyl tin dimethoxide
with components in the
transesterification of various alcohols with methyl
acrylate or methacrylate or
other alkyl acrylates or methacrylates, titanium alkoxides
such as titanium
butoxide, titanium ethylhexoxide, titanium methoxide,
titanium ethoxide,
titanium iso-propoxide, etc.; titanium chelates such as Ti
chelated with
dicarbonyl compounds like 2,4-pentanedione, and methanolic
magnesium methylate,
and alkali and alkaline earth metal
hydroxides/alkoxides/hydrides. The amount
of the catalyst added is 0.1 - 10 mole percent.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: TRANSESTERIFICATION PROCESS SPECIFIED CATALYST
MOLAR RATIO
CONDITION

DERWENT-CLASS: A14 E19

CPI-CODES: A01-D10; A02-C; A10-E07B; E05-F01; E05-L01;

CHEMICAL-CODES:
Chemical Indexing M3 *01*
Fragmentation Code